

IN THE CLAIMS:

Claim 1 (Currently Amended): A cellular wireless communication network system, comprising:

a plurality of base stations ~~and a plurality of mobile stations~~, wherein said base stations are connected together with wireless communication~~[,]~~; and
a plurality of mobile stations, wherein communication between at least one of the
plurality of base stations and at least one of the plurality of mobile stations is achieved by a
packet CDMA communication method, such that a packet of the packet CDMA communication
method includes a frame composed of a preamble block having a barker code and an information
block having an orthogonal M series codes.

Claim 2 (Withdrawn): A wireless communication network system as claimed in Claim 1, wherein said wireless communication with which said base stations are connected together, is achieved by an OFDM communication method.

Claim 3 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim 1, wherein said wireless communication ~~with which~~ among the plurality of ~~[[said]]~~ base stations ~~are connected together~~, is achieved by ~~an AS-CDMA a Spread Spectrum~~
CDMA (SS-CDMA) communication method.

Claim 4 (Cancelled).

Claim 5 (Cancelled).

Claim 6 (Withdrawn): A wireless communication network system as claimed in any one of Claim 1 to Claim 5, wherein the communication between said base station and said mobile stations, is achieved by a multicode transmission method for both of a downlink and an uplink.

Claim 7 (Withdrawn): A wireless communication network system as claimed in Claim 6, wherein said multicode transmission method comprises:

assigning data to a plurality of different orthogonal spread code;
combining together the data assigned to the respective orthogonal code at the same time to compose one information block; and
adding said information block after the preamble block to compose the one flame when the information is transmitted.

Claim 8 (Withdrawn): A wireless communication network system as claimed in Claim 7, wherein said multicode transmission method comprises:

detecting said information block by a detection of said preamble,
reversely spreading said spread code after a synchronization of the respective spread code has established which are included in the information block; and
demodulating the data based on the respective spread code and synthesizing the respective data when the information is received to demodulate the whole information.

Claim 9 (Withdrawn): A wireless communication network system as claimed in any one of Claim 1 to Claim 5, wherein the communication between said base station and said mobile stations, is achieved by a M-array transmission method for both of a downlink and an uplink.

Claim 10 (Withdrawn): A wireless communication network system as claimed in Claim 9, wherein said M-array transmission method comprises:

dividing the data and assigning the orthogonal spread code to the every data respectively; selecting the spread code in order of time base and combining together to compose one information block; and

adding said information block after the preamble block to compose the one flame of the data when the information is transmitted.

Claim 11 (Withdrawn): A wireless communication network system as claimed in Claim 10, wherein said M-array transmission method comprises:

detecting said information block by a detection of said preamble; establishing synchronization of the respective orthogonal spread code which are included in said information block;

generating a number of reverse spread code, the number of which corresponds to the number of spread code used based on the synchronizing signal;

reversely spreading the respective spread code which are included in said information block; and

demodulating the data through integral networks by comparing the resulted integrated value made by the respective integral networks when the information is received.

Claim 12 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim 1 [[4]], wherein [[the]] an uplink communication between ~~said base station and said the at least one of the plurality of mobile stations and the at least one of the plurality of base stations~~, is achieved utilizing the ~~approximate synchronized~~ Approximate Synchronized CDMA (AS-CDMA) method ~~at the uplink, and wherein said such that a packet is composed of the AS-CDMA method includes a [[one]] flame which includes having~~ a synchronizing block and an information block ~~which are arranged in this order, [[and]] said information block includes comprises~~ the approximate synchronized CDMA AS-CDMA code.

Claim 13 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim [[12]] 1, wherein ~~the downlink~~ communication between the at least one of the plurality of base stations and the at least one of the plurality of said base station and said mobile stations, is achieved by ~~that an~~ information about [[the]] a phase is included [[on]] in the preamble portion, such that and said cell information about the cellular wireless communication network system the cell is provided determined from [[by]] the information about the phase [[at]] the downlink.

Claim 14 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim 13, wherein the communication between said base station and said mobile stations, is achieved by that an absolute phase and reverse spreading are determined from is detected by the phase information about the phase included in the on said preamble block portion as a reference phase, and said data are such that detected absolute phase and reverse spreading are subjected to [[the]] a phase correction and [[the]] a frequency offset correction after reverse spreading, then [[said]] resultant data [[are]] is demodulated by [[the]] an absolute synchronizing detection at the downlink.

Claim 15 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim 1, wherein said base station takes stations detect a [[the]] correlation of data transmitted the through downlink communication and uplink communication at the receiving portion and then detects the determine a receiving timing of the data, such that calculate a timing that said receiving timing becomes [[the]] most suitable is calculated, inserts the and a most suitable timing is inserted as [[the]] a timing controlling information [[into]] in the flame for the downlink communication and send the data.

Claim 16 (Currently Amended): [[A]] The wireless communication network system as claimed in Claim 15, wherein said mobile station establishes [[the]] synchronization of [[the]] spread code by detecting the spread code included in the preamble ~~block portion at the receiving portion of the frame transmitted through the downlink communication, after making performs~~ [[the]] reverse spreading of the spread code, demodulates [[the]] resultant data through [[the]] integral networks, [[then]] extracts [[the]] a transmission timing control information which is inserted in the [[received]] transmitted flame, controls [[the]] chip timing of the reverse spread code based on the transmission timing controlling information, and ~~transmit the transmits~~ demodulated data [[as]] through the uplink communication.